

Exponential Review  
Test Tuesday

Exponential Review

p444 q 1-6

p445 q 8-13

p446 q 1-7

+ Graphing Exponential  
Functions- Handouts

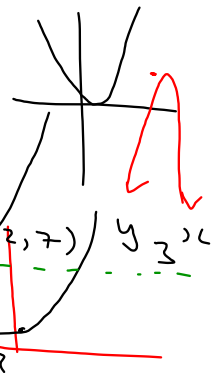
May 22-7:54 AM

Handout Review

$$y = a(x-h)^2 + k$$

$$y = -3(x-2)^2 + 3$$

$$y = 3^{x+2} + 6$$



May 22-7:59 AM

$$y = 2^x$$

$$y = 2^x - 6$$

$$y = 2^{x-3}$$

May 22-1:53 PM

$$y = 3(2^x)$$

$$y = -2(2^x)$$

$$y = \frac{1}{4}x$$

May 22-1:56 PM

Unit Review Handout

#5  $P(n) = P_0(1+r)^n$

$P(n)?$

$$P(1) = 250$$

$r = \text{doubles}/30 \text{ min} \quad ? \quad 1.00\%$

$n = 8$

$$P(n) = 250(1+1)^8$$

$$= 250(2)^8$$

$$= 250(256)$$

$$= 64000$$

May 22-2:04 PM

Applications of Exponential  
Functions

q 8

$$P(n) = P_0(1+r)^n$$

$P(n)?$

$$P(0) = 1000 = 1000(1+1.0)^{10}$$

$$r = 1.0$$

$$n = 10$$

$$= 1000(2)^{10}$$

$$= 1024000$$

May 22-2:09 PM

$$\begin{aligned}
 & 200^{4\frac{1}{3}} \\
 &= \sqrt[3]{200^4} \\
 &= \sqrt[3]{1.6000000000} \\
 &= 1169.6
 \end{aligned}$$

May 26-10:40 AM

$$\begin{aligned}
 3a) P(n) &= 0.25g \\
 P(0) &= 1g \\
 r &= \frac{1}{2} = 0.50 \\
 n &= ? \\
 P(n) &= P(0)(1-r)^n \\
 0.25 &= 1(1-0.50)^n \\
 0.25 &= 1(0.50)^n \\
 0.25 &= 0.50^n \\
 \sqrt[1]{0.25} &= 0.50^n \\
 0.25 &= 0.50^n \\
 n &= 2 \\
 n &= 2 \times 140 \\
 &= 280d
 \end{aligned}$$

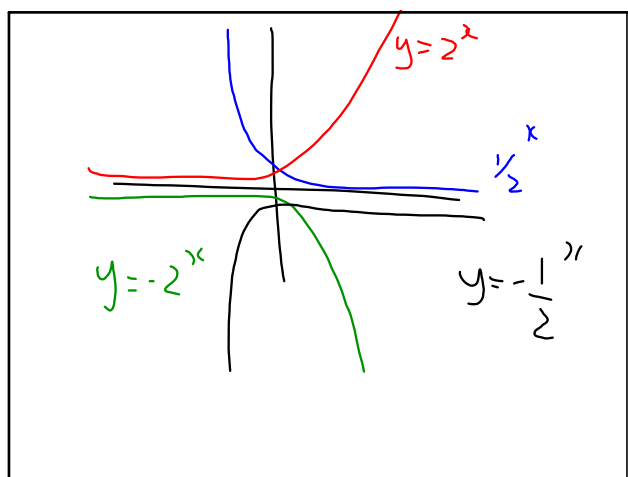
May 22-2:12 PM

$$\begin{aligned}
 9. \quad P(n) &= P_0(1+r)^n \\
 P_0 &= 1500 \\
 r &= \text{triples as a } \% \quad 200\% \\
 n &= \text{\# of times} \\
 2 \quad P(n) &= 1500(1+2.0)^n \\
 P(n) &= 1500(3)^n
 \end{aligned}$$

May 25-10:15 AM

$$\begin{aligned}
 & (10^1(10^3)^{-1})^{-2} \\
 & ((10^1)(10^{-3}))^{-2} \\
 & (10^{-2})^{-2} \\
 & (10)^{+4}
 \end{aligned}$$

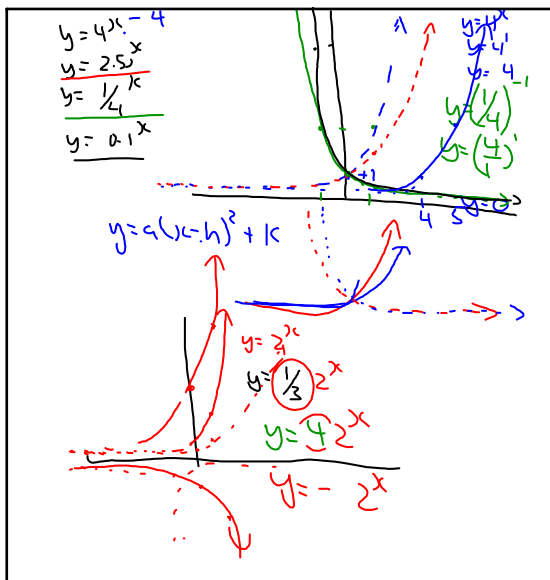
May 25-10:57 AM



May 26-10:51 AM

$$\begin{aligned}
 & 125^{\frac{1}{3}} \\
 & \sqrt[3]{125} = 5 \\
 & 0.25 \\
 & 81^{\frac{1}{4}} \\
 & \sqrt[4]{81} = 3
 \end{aligned}$$

May 26-11:42 AM



May 4-9:15 AM

$$\begin{aligned} & 3^{4+1+1} = 3^6 \\ & \begin{pmatrix} (-7)^5 \\ (-7)^{2+5} \\ (-7)^0 \end{pmatrix} \quad \begin{pmatrix} (-1)^4 \\ +1^4 \\ +2 \end{pmatrix} - (1)^4 \\ & \frac{4^{12}}{4^{12}} = \frac{4^{12-12}}{1} \\ & \frac{125^{1/3}}{\sqrt[3]{125}} = 5 \\ & \left( \frac{16^{3/2}}{\sqrt{16}} \right)^2 = (4)^2 = 4 \times 4 = 16 \\ & \frac{121}{121} = 1 \\ & \left( \frac{10}{121} \right)^2 \end{aligned}$$

Dec 12-11:03 AM

$$P_{(n)} = P_0 (1+r)^n$$

$P_{\text{of new}} P(n) = ?$

Pop original  $P(0) = 2500$

$$r - \text{growth rate} = 0.05$$

$n = \# \text{ of times it grows} = 10$

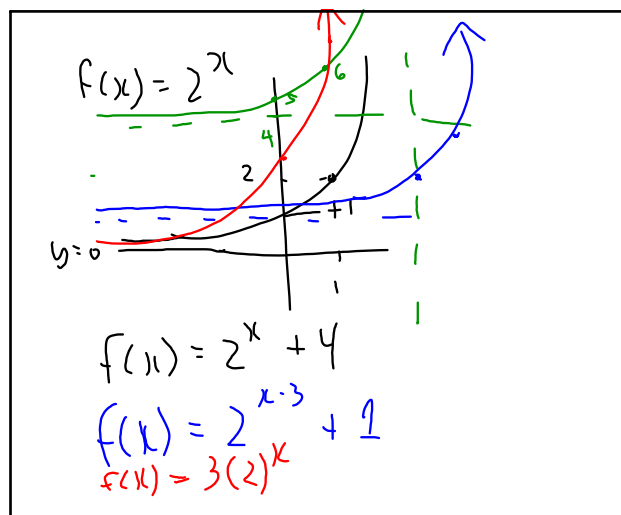
$$P(n) = 2500(1 + 0.05)^{10}$$

$$= 2500(1.05)^{10}$$

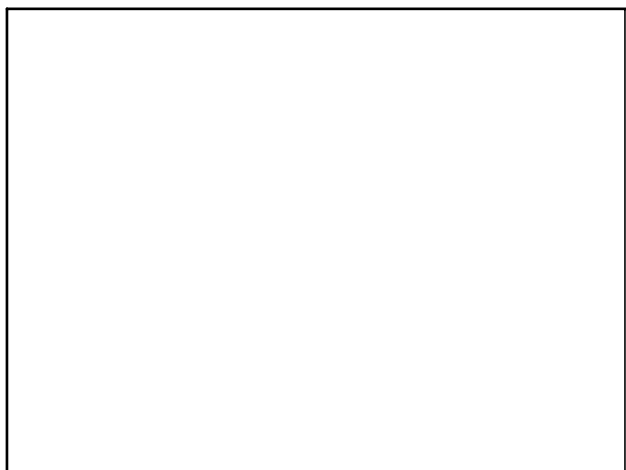
$$= 2500(1.63)$$

$$= 4072.23$$

Dec 12-11:12 AM



Dec 12-11:23 AM



Dec 4-7:22 AM